106.7 - Zeolites (powder form)

These RMs are intended to provide a common source of zeolite materials for measurement comparisons. Additional reference and information values are provided for atomic ratios of Si to Al and Na to Al, trace element content, enthalpy of formation, unit cell parameters and particle size distributions. Figures are provided showing spectra for NMR analyses, plots of particle size distribution, electron microscope images of particles and plots of variation in sample mass with change in ambient humidity.

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PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM Description Unit of Issue	8850 Zeolite Y (35-40 g)	8851 Zeolite A (35-40 g)	8852 Ammonium ZSM-5 Zeolite (35-40 g)
Major Components of Zeolite RMs (mass fractions are given in %)*			
Na	7.225	12.732	
Al	8.49	14.766	1.396
Si**	22.52	15.27	41.18
Si***	30.336	19.541	45.19
LOI	25.679	21.464	8.5
LOF	25.37	22.1	8.47

^{*}See current certificate of analysis for exact assigned values and estimates of uncertainty.

^{**}Value relative to the hydrated sample mass.

^{***}Value relative to sample mass ignited at 1000 °C.